## AMENDMENTS TO THE CLAIMS

1. – 36. (Cancelled)

37. (Currently Amended) A method of testing a plurality of dies fabricated on a wafer, said method comprising:

connecting a first terminal of each of said plurality of dies to a common signal conductor; ~~through respective temporary isolation devices which allow said dies to receive a signal from said common signal conductor during a first test procedure; and~~

connecting a second terminal of each of said plurality of dies to the first terminal on each respective die through a diode which allows said second terminal to receive a signal from said common signal conductor during a first test procedure; and

~~connecting said first terminal of at least some of said plurality of dies to another conductor~~ reverse biasing the diode on at least some of said dies during a second test procedure~~, said temporary isolation devices being activated during said second test procedure~~ to isolate said ~~first~~ second terminal of said at least some of said dies from said common signal conductor during said second test procedure.

38. (Currently Amended) A method of testing a semiconductor die on a wafer comprising:

(1) applying voltage to a ~~first~~ voltage line which connects with first and second voltage terminals of each of a plurality of dies on said wafer through ~~respective temporary isolation devices~~ a diode between the first and second voltage terminals on each of said plurality of dies;

(2) removing voltage from said ~~first~~ voltage line; and

(3) applying voltage to a die by connecting a probe to ~~a first~~ said first or second voltage terminals ~~terminal~~ associated with said die, at least a portion of said die

being isolated from said ~~first~~ voltage line by ~~a respective temporary isolation device~~ the diode.

39. (Currently Amended) ~~A~~ The method of claim 38 wherein steps (1) and (2) are performed before step (3).

40. (Currently Amended) ~~A~~ The method of claim 37 further comprising permanently isolating a die from said common ~~first voltage~~ signal conductor as a result of tests performed in said first or second test procedures.

41. (Currently Amended) ~~A~~ The method of claim 38 wherein step (1) is performed after steps (2) and (3).

42. (Currently Amended) ~~A~~ The method ~~as in~~ of claim 37, further comprising permanently isolating one or more of said plurality of dies found defective during at least said first or second test procedure from said common signal conductor.

43. (Currently Amended) ~~A~~ The method ~~as in~~ of claim 42, wherein said permanently isolating one or more of said plurality of dies comprises activating a permanent isolation device coupled between said common signal conductor and one or more of said plurality of dies found defective during said first or second test procedure.

44. (Currently Amended) ~~A~~ The method ~~as in~~ of claim 43, wherein said permanent isolation device comprises a laser activated fuse.

45. (Currently Amended) A method of testing a semiconductor wafer comprising:

supplying a first signal to a first signal line on a semiconductor wafer coupled to a plurality of dies fabricated on said wafer during a first test mode, each die comprising an integrated circuit and a first terminal used to apply said first signal to internal components of said die;

determining internal components of one or more dies to temporarily isolate from said plurality of dies;

supplying a second signal to a ~~unidirectional circuit device~~ diode on said one or more dies to temporarily isolate said internal components of said one or more dies from said plurality of dies during a second test mode; ~~and~~

~~temporarily isolating said one or more dies from said plurality of dies when said second signal is supplied to said unidirectional circuit device;~~

wherein, each ~~unidirectional circuit device~~ diode is coupled between ~~said first signal line and~~ said first terminal and a second terminal of a respective die for allowing said first signal to move in only one direction between said ~~first signal line and the~~ first terminal and said second terminal of a respective die.

46. (Canceled)

47. (Canceled)

48. (Canceled)

49. (Currently Amended) ~~A~~ The method ~~as in~~ of claim ~~48~~ 45, wherein ~~unidirectional circuit device comprises a diode,~~ said first test mode reverse biases said diode to electrically decouple said first signal ~~conductor~~ line with said circuitry for performing an electrical function on one of said dies.

50. (Currently Amended) ~~A~~ The method ~~as in~~ of claim 45, further comprising permanently isolating one or more of said plurality of dies found defective during said first or second test modes from said first signal line.

51. (Currently Amended) ~~A~~ The method ~~as in~~ of claim 50, wherein said permanently isolating one or more of said plurality of dies comprises activating a permanent isolation device coupled between said first signal line and one or more of said plurality of dies found defective during said first or second test modes.

52. (Currently Amended) ~~A~~ The method ~~as in~~ of claim 50, wherein said permanent isolation device comprises a laser activated fuse.